



## FEATURES HIGHLIGHT

- Processor – Samsung ARM9 S3C2410
- Operating System Linux
- Memory – 32/64MB SDRAM, 32/64MB FLASH (factory load)
- Integrated with a contact-less Smart Card reader module
- Interface with other electronic units and systems co-located OR located outside in main central stations, using industry standard communication protocols, RS422, USB, Ethernet and WLAN
- User interface including display

## APPLICATIONS

- Bus Card Processor
- Rail Card Processor
- Smart Card Loading and Validation device
- Smart Card Enquiry device
- Access Control Device

## OVERVIEW

BCP – Bus Card Processor, is a Samsung ARM9 processor based Electronics Controller Card for use as an Automatic Fare Collection Device in public transport networks.

The Bus Card Processor Unit (BCP) is part of a modular and flexible solution that includes a Bus Computer Unit (Server), for building automatic fare collection system for the bus transport application.

For low cost systems, the BCP with in-built WLAN/GPRS can support the wireless communication link to the bus station and not require the BCU.

BCP communicates with Contact Less cards, through the contact-less card reader module and deducts the appropriate fare for the trip. The BCP communicate with contact-less card reader modules that support smart card standard ISO14443A/B, ISO15693, Mifare™ Classic, ICODE1, NFC protocols.

## SPECIFICATIONS

### Physical Characteristics

Dimensions: 200(L) x 120(W) x 40(H) mm  
7.9 (L) x 4.7 (W) x 1.6(H) in.

Display:
 

- LCD Monochrome FSTN 128\*64 / 160\*80, with backlight and temperature controlled
- LCD TFT color QVGA Interface (optional)
- LED High Current Output 10x (optional)

Speaker: Support polyphonic playback

Power Supply: Automotive grade DC-DC Power Supply

### Performance Characteristics

CPU: Samsung ARM9 S3C2410X processor

Operating System: Linux 2.4

Memory (RAM/ROM): Flash – 16M / 32M(default) / 64M  
DRAM – 16M / 32M(default) / 64M

Cradle Interfaces:
 

- 12 Pin / 16 Pin
- Custom configurable, based on the required communication interfaces
  - USB Host / Slave 1.1
  - RS232 / RS422
  - Ethernet 10base

Contactless Reader: IS014443A/B, ISO15693, Mifare Classic, ICODE1

Other Interfaces:
 

- IrDA 1.0 (optional)
- WLAN (optional)
- GPRS/GSM Modem (optional)
- GPS Tracking (optional)

Real Time Clock:
 

- Full Clock Feature: second, minute, hour, date, day, month and year
- Battery back-up

Security Module:
 

- ISO/IEC 7816-1/2/3/4
- Security Application Modules(default 2 Slots)
- External Smart Card connector (optional)
- EMV specifications compliance EMV2000 V4.0
- Compliance with also, CB (Cartes Bancaires), ZKA, Mondex, Proton

### User Environment

Operating Temperature: Standard 0°C to +45°C

Storage Temperature: -20°C to +65°C

Humidity: 15% to 95% relative humidity, non-condensing

Vibration and Shock:
 

- Withstand sinusoidal vibration, to mechanical condition 5M2 along the 3 axis at 2hz to 9Hz (3.3mm peak amplitude)
- Withstand shock, upto 10g along 3 axis

**Important: Specifications provided in this datasheet are only preliminary. Final specifications and the availability to be checked with Prodigy while placing the order.**